

### **REMARKS**

The non-final Office Action was issued on pending claims 1-21. In the Office Action, claims 1-13, 16, 17 and 20 stand rejected and claims 14, 15, 18, 19 and 21 were objected to. In this Response, claims 1, 6, 8, 10 and 12 have been amended, claims 2-5, 7, 9, 11, and 13-21 have been cancelled without prejudice and claims 22-27 have been added. Thus, claims 1, 6, 8, 10, 12, and 22-27 are pending in the application.

Applicants invite the Examiner to call Applicants' Representative to discuss any issues with this application.

### **Allowable Claims**

At page 8 of the Office Action, claims 14-15, 18-19 and 21 were objected to as being dependent upon a rejected base claim, but noted as being allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. Applicants thank the Examiner for the notice of allowable claims.

Claims 22-27 have been added. Claim 22 corresponds to claim 14 rewritten in independent form. Claims 23 and 24 correspond to claims 15 and 16, respectively, and depend from claim 22. Claim 25 corresponds to claim 18 rewritten in independent form. Claim 26 corresponds to claim 19 rewritten in independent form. Claim 27 corresponds to claim 21 rewritten in independent form. Claims 13-21 have been cancelled without prejudice.

Applicants submit that claims 22-27 are allowable.

### **Claim Rejections – 35 USC §§ 102, 103**

At pages 2 and 3 of the Office Action, claims 1-6 were rejected under 35 USC §102(e) as being anticipated by Kato et al. (US 6,181,858). At page 4 of the Office Action, claims 1-7 were rejected under 35 USC §102(b) as being anticipated by JP 10-246830. At page 4 of the Office Action, claims 1 and 10 were rejected under 35 USC §102(b) as being anticipated by Hirano et al. (Proceedings of general meeting in 1998 of The Institute of Electronics, 6 March 1998, page 223). At pages 5 and 6 of the Office Action, claims 1-4, 8-9, 13, 16-17 and 20 were rejected under 35 USC §103(a) as being unpatentable over Sasaoka et al. (Translation of JP 11-

167038). At pages 6-8 of the Office Action, claims 10-12 were rejected under 35 USC §103(a) as being unpatentable over Kato et al. Applicants respectfully disagree.

Claim 1 has been amended to clarify the claim. Particularly, claim 1 has been amended to include claims 2 and 3. Claim 6 has been amended to depend from claim 1 and to include claim 7. Claim 8 has been amended to depend from claim 1 and to include claim 9. Claim 10 has been amended to include claim 11. Claim 12 has been amended to include claim 10. Claims 2-5, 7, 9 and 11 have been cancelled without prejudice for consistency with the amended claims. Accordingly, the claims have been amended to be clarified.

Applicants' invention, as claimed in claim 1, pertains to a dispersion shifted optical fiber. Claim 1 defines specific features of the relative refractive index of the dispersion shifted optical fiber. Particularly, claim 1 calls for element a, element b, element c, and element d of original claim 2. These claimed features are not merely general refractive index features for existing dispersion shifted optical fibers. Rather, Applicants' invention includes and claim 1 claims additional features for determining an advantageous refractive index. Furthermore, Applicants' invention having the claimed features for the refractive index provides advantages. For example, Applicants' invention can provide a dispersion shifted optical fiber that is essentially single mode and is capable of fulfilling the condition of the bending loss of 100 dB/m or less, and that also provides a sufficient increase in the effective core area and a sufficient reduction in the dispersion slope. Accordingly, an improved dispersion shifted optical fiber for a wavelength multiplex transmission system, in particular, can be provided by Applicants' invention.

As to Kato et al., the Office Action asserts at page 3 that Kato et al. teaches each and every element of claim 2 including element a, element b, element c, and element d. Applicants respectfully disagree. The references in the Office Action to Kato et al. for elements a-d merely pertain to general definitions for calculating relative refractive index. Kato et al. does not disclose or suggest the particular elements a-d of Applicants' invention as claimed in claim 1.

As to JP 10-246830, Applicants note that JP '830 is assigned to the same assignee as the present invention. Applicants respectfully submit that JP '830, particularly Fig. 1 and the table on page 7, does not teach each and every element of claim 1. The Office Action does not point out all of the claimed elements in JP '830.

As to Hirano et al., claim 2, which has been included in claim 1, was not rejected in view of Hirano et al.

As to Sasaoka et al., Applicants respectfully submit that Sasaoka et al. does not disclose Applicants' claimed invention, such as the refractive index features claimed in original claim 2.

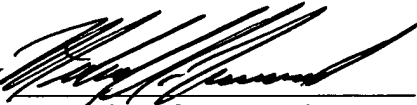
Thus, Applicants submit that the claim rejections have been overcome.

**CONCLUSION**

For the foregoing reasons, Applicants submit that the patent application is in condition for allowance and request a Notice of Allowance be issued.

Respectfully submitted,

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